



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/699,419

10/31/2003

Anush Kumar

MSFT-2761/302030.1

2077

23377 7590 01/06/2009
WOODCOCK WASHBURN LLP
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER

ANDERSON, FOLASHADE

ART UNIT

PAPER NUMBER

3623

MAIL DATE

DELIVERY MODE

01/06/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/699,419	Applicant(s) KUMAR ET AL.	
	Examiner FOLASHADE ANDERSON	Art Unit 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 10/20/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 16-20, 24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 16-20, 24 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is final in response to Applicant's submission filed on October 20, 2008. Currently, claims 1-7, 16- 20, 24 and 25 are pending. Claims 8-15 and 21-23 are canceled. Claims 1, 2, 4, 16, and 18 are amended. Claims 24 and 25 are newly added.

Response to Amendment

2. Applicant's amendment to claim 1 is sufficient to overcome the 35 UCS 101 rejection set forth in the previous office action.

3. Applicant's amendments to claims 1 and 16 are sufficient to overcome the 35 USC 112, second paragraph rejection raised in regards to the claim language **"optionally changing the business rules and applying the changed business rules during execution of the workflow"** set forth in the previous office action.

4. Applicant's amendments to claims 2 and 18 are sufficient to overcome the 35 USC 112, second paragraph rejection raised in regards to the claim language **"pre-defined progression of operations"** set forth in the previous office action.

Response to Arguments

5. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues with respect to Gleason (1) applying a plurality of business rules to the workflow at the nodes to affect the operations (2) rules engine and the workflow

processor are implanted in the same processor (3) changes the business rules and applying the changed business rules during execution of the workflow without stopping execution of the workflow and (4) delayed query to evaluate at least one of the business rules.

In response to Applicant's argument (1) Examiner respectfully disagrees, Gleason teaches a processor for the execution of the business rules (0004 "storing and evaluating the business rules in a server based engine"), thus the engine (equivalent to the instant application's workflow processor) encompasses the business rules. It is old and well known in the art that a node is a junction. In the specification of the instant application it is simply states that "the workflow includes business operations defined at nodes in the business process. The business rules are applied at the nodes," (instant application 0008) as such the claim has been viewed in light of the specification and the term "node" to mean the junction at which a business rule is applied. Gleason discloses a workflow method which uses a decision-tree based map (0013) it is old and well known in the art that a decision tree contains junctions. Gleason further a rule set linked to each of the activity assignments (0022) i.e. the decision component of the workflow. Finally, Gleason discloses an example of the affects on an operation "if the application named in the URL relates to an excel workbook file it will be automatically downloaded from a document library and a shell execute performed to invoke Excel." (0070). The invention of Gleason renders the claim limitation in question obvious.

In response to Applicant's argument (2) Examiner respectfully disagrees, Gleason teaches storing and evaluating the business rules in a server based engine

(0004) and the process engine provides a process designer that handles generation and editing of business process and process rulesets. The process engine provides a process manager that handles running of scheduling of business process (0082). This implies that the rules engine and the workflow processor are implanted in the same processor. It is noted that the rulesets is equivalent of the rules engine i.e. code and the processor, process engine, is the equivalent of the workflow processor of the instant application. The invention of Gleason renders the claim limitation in question obvious; however even if the Examiner has missed interpreted conjoined nature of the invention of Gleason case law states that to merely combining prior art elements according to known methods to yield a predictable results bars patentability. KSR International Co. v. Teleflex Inc. (KSR), 550 U.S. ___, 82 USPQ2d 1385 (2007)

In response to Applicant's arguments (3) and (4) Examiner notes that the arguments are made with respect to the newly added amendments which have been addressed in the updated rejection.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-7, 16-20, 24 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 and 16 recites “**wherein the rules engine and the workflow processor are implemented in a same processor**” It is unclear if what Applicant is encompassing in this limitation, since a rules engine is commonly understood to be a software application i.e. a set of code which manipulates data or a synonym for a “processor”, where as a processor is a physical apparatus by which the software application is executed. As stated it appears as if the Applicant is implying that the rules engine and workflow processor are the same thing rather than two distinct things. For purposes of examination the step is interpreted to mean wherein the rules engine is implement by the workflow processor.

Claims 2-7 and 24 which depend from claim 1 suffer similar deficiencies. Claims 17-20 and 25 which depend from claim 1 suffer similar deficiencies. Correction is required.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3, 5, 7 16, 17, 19, 20, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gleason (2003/0195762 A1) in view of Surasinghe (US Patent 7,124,145 B2).

Claim 1

Gleason teaches **a method of tracking operations in an automated business process, the method comprising:**

- **defining a plurality of operations at a plurality of nodes in a business process** (0003, the invention features a workflow method including specifying data source, invoking a decision-tree based map using icons that represent elements of business rules 0013 a map representing a business process flow with input and output, a start and end activity destination, activity assignments, and a rule set linked to each of the activity assignments, and 0022, users of the system are able to define a process and associate the responsible parties, where the Examiner understands a node to be a connection point in a process for example those of the decision tree);

- **executing a workflow comprising the operations** (0010 executing the selected activities (operations) and 0017 system enables the execution of business process application (operations));
- **applying a plurality of business rules to the workflow at the nodes to affect the operations, wherein the plurality of business rules are applied using a rules engine integrated with a workflow processor, and wherein the rules engine and the workflow processor are implemented in a same processor** (0019 web service is a rule or action within a rule that interacts within an external system via the web, for the purpose of querying and retrieving a response from an external system, which response is the input to the next rule or activity within the business process and 0004 storing and evaluating the business rules in a server-based engine);
- **changing the business rules and applying the changed business rules during execution of the workflow** (0025 individual rules and sets of rules that are configurable by the use of variables assigned and 0022 the user can generate a set of variables that in addition to being one output of the application, can control decisions and flow of the business process thus making the process dynamic and adaptive to external business conditions, where the Examiner understands dynamic to indicate a continuous action i.e. during execution); **and**

- **providing a correlation between the business rules applied to the nodes and the corresponding affected operations to track operations within the workflow** (0003 linking input from the input and output forms to dynamic variables within the decision-tree based map and 0007 tracking a status of the business process).

Gleason does not expressly teach the limitation of **without stopping the execution of the workflow**.

Surasinghe teaches **without stopping the execution of the workflow** (col. 2, lines 42-51; where dynamically implies real-time i.e. without stopping), in an analogous art for the purpose of implementing business plans.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Gleason to include the without stopping the execution of the workflow as taught by Surasinghe to allow the user to accommodate new business plans without having to rewrite entire software applications (Surasinghe col.1 lines 51-55).

Claim 2

Gleason teaches **the method of claim 1, wherein the operations are at least one of transactions internal to a business enterprise and transactions external to a business enterprise** (0068 applications that input or amend data on an interactive basis before arriving at the final values, such as budgeting (transaction), where the Examiner understands that it was old and well known in the art at the time the invention was made that budgeting was a transaction type that could have been performed either

Art Unit: 3623

internal or external to an enterprise. Further the Examiner understands that within a workflow process a transaction can only be either internal or external and therefore any reference to a workflow process with the step of executing would read on this claim).

Claim 3

Gleason teaches **the method of claim 1, wherein the operations comprise passing XML formatted messages according to the workflow** (0028 business process management engine to access a Microsoft COM.RTM (Component Object Model) through the use of a SOAP (Simple Object Access Protocol)/XML (eXtensible Mark up Language) services and 0048 Any client application capable of generating an HTML request that complies with the SOAP standard, and that conforms to a request layout described in WSDL file, can use SOAP services as a way of communicating with the process engine, where the Examiner understand that the process engine executes the workflow process 0011).

Claim 5

Gleason teaches **the method of claim 1, wherein optionally changing the business rules and applying the changed business rules during execution of the workflow comprises implementing a changed business rule while avoiding at least one of suspending, recompiling and redeploying the workflow** (0068, The COM layer additionally provides a local cache capability for the API information. Performance is improved as any information already returned from a server based process engine remains available locally at the client. The cache layer can persist itself to disk and therefore a client application can be coded to continue working while

Art Unit: 3623

disconnected from the process engine. Method calls are provided in the COM layer to allow the cache to be refreshed from the process engine and so reflect any updated information.)

Claim 7

Gleason teaches **the method of claim 1, wherein providing a correlation between the business rules applied to the nodes and corresponding affected operations comprises providing a correspondence between a specific business rule executed at a node and a resultant state of an operation within the workflow of the automated business process** (0082 the process engine provides monitoring of the progress of active processes and displaying log information for processes that have run, where the Examiner understands that it was old and well known in the art at the time the invention was made that a log would contain the status and results of an operations step)

Claim 16

Claim 16 is substantially similar to claim 1 and is therefore rejected for substantially the same reasoning given above with regards to claim 1.

Claim 17

Claim 17 is substantially similar to claim 3 and is therefore rejected for substantially the same reasoning given above with regards to claim 3.

Claim 19

Claim 19 is substantially similar to claim 5 and is therefore rejected for substantially the same reasoning given above with regards to claim 5.

Claim 20

Claim 20 is substantially similar to claim 7 and is therefore rejected for substantially the same reasoning given above with regards to claim 7.

Claim 24

Gleason teaches **the method of claim 1, wherein the rules engine and the workflow processor are integrated via an interface control layer that provides and integrated user interface** (0003 and 0017)

Claim 25

Claim 25 is substantially similar to claim 24 and is therefore rejected for substantially the same reasoning given above with regards to claim 24.

10. Claims 4 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gleason (US Publication 2003/0195762 A1) in view of Scheurich et al (US Patent 7,174, 342).

Claim 4

Gleason teaches **the method of claim 1**; however he is silent on **constructing a delayed query to evaluate at least one of the business rules, the query delayed in the workflow process such that the query is executed over a data set smaller than a full sized data set whereby a time-efficient query results.**

Scheurich teaches **constructing a delayed query to evaluate at least one of the business rules, the query delayed in the workflow process such that the query is executed over a data set smaller than a full sized data set whereby a**

time-efficient query results (col. 13, 13-17) in an analogous art for the purpose of querying, analysis and distributing directives in the processing of information.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the invention of Gleason the delayed query as taught by Scheurich since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Claim 18

Claim 18 is substantially similar to claim 4 and is therefore rejected for substantially the same reasoning given above with regards to claim 4.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gleason (US Publication 2003/0195762 A1) in view of Agarwal et al (An operational Approach to the design of workflow systems, published 2000).

Claim 6

Gleason teaches **The method of claim 1, wherein optionally changing the business rules and applying the changed business rules during execution of the workflow** (0022 and 0025). Further Gleason teaches a decision tree based process map (0017) commonly associated with if/then type of program at the time the invention

Art Unit: 3623

was made; however Gleason does not expressly teach **utilizing at least one declarative if/then statement**.

Agarwal teaches **utilizing at least one declarative if/then statement** (pg. 550 If the test result is false then an approval activity. If the result of the test is true the approval is skipped. Class 'if' representing decisions that can be automatically taken by the workflow enactment service) in an analogous art for the purpose of modeling the workflow system (abstract)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Agarwal in the invention of Gleason to allow for the ease of non-technical person's understanding and management of the process structure (Agarwal, 554).

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FOLASHADE ANDERSON whose telephone number is (571)270-3331. The examiner can normally be reached on Monday through Thursday 8:00 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Folashade Anderson/
Examiner, Art Unit 3623

/Andre Boyce/
Primary Examiner, Art Unit 3623

Application/Control Number: 10/699,419
Art Unit: 3623

Page 16